

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 5 May 2006. Responsive to the rejections made in the Official Action, Claims 1 – 6, 8 – 10, 14, 16 – 22 have been amended to clarify the language thereof and/or the combination of elements which form the invention of the subject Patent Application.

In the Official Action, the Examiner rejected Claims 1 – 3, 14 – 15, and 16 – 17 under 35 U.S.C. § 103(a), as being unpatentable over Fling et al., U.S. Patent Application Publication 2003/0058961, in view of Le Torc'h, U.S. Patent No. 6,483,827. Claims 4 – 7 and 18 were rejected under 35 U.S.C. § 103(a), as being unpatentable over Fling et al. in view of Le Torc'h, and further in view of Tian, U.S. Patent No. 6,624,710. Further, Claims 11, 12 and 19 – 22 were rejected under 35 U.S.C. § 103(a), as being unpatentable over Fling et al. in view of Le Torc'h, and further in view of Yamazaki et al., U.S. Patent No. 5,398,007. Further, Claims 8 – 10 and 13 were rejected under 35 U.S.C. § 103(a), as being unpatentable over Fling et al. in view of Le Torc'h and Tian, and further in view of Yamazaki et al.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to a single crystal oscillator RF transmitter system. The system includes a

microprocessor and a converter coupled to the microprocessor for converting data from the microprocessor to be transmitted into packets. The system includes a local oscillator responsive to an external crystal for generating a first clock signal having a frequency in a radio frequency band. The system includes a clock switch coupled to the local oscillator for providing a second clock signal at a lower frequency than the first clock signal to the microprocessor and a third clock signal to the converter. The third clock signal is a different frequency than the first clock signal and the second clock signal, the system includes a transmitter connected to an output of the converter for receiving the packets and is coupled to the local oscillator for use of the first clock signal as an RF carrier for the packets to be transmitted by the transmitter. The invention of the subject Patent Application is also directed to a method for transmitting data with an RF transmitter system having a single crystal oscillator and including a microprocessor connected with a converter that is in turn connected to a transmitter. The method includes the step of generating a first clock signal at a radio frequency with a crystal oscillator for providing to the transmitter a carrier signal. It includes the step of generating a second clock signal and a third clock signal by dividing down the first clock signal for respectively providing to the microprocessor and converter clock signals of respectively reduced frequency. Further, the method includes the steps of converting the data into packets by the converter for output to the transmitter, and transmitting the packets modulated on the first clock signal.

In contradistinction, the Fling et al. reference is directed to a method and system for recovering information from a magnetic field signal. In particular, the reference discloses a receiver, shown in Fig. 7, wherein the signal obtained from an antenna array 702 is fed to a frequency down converter, amplifier and filter 704 before being fed to an analog digital converter 706 and a data recovery system 712. As shown in Fig. 14, the **received** signal is down converted in the mixer 1410 utilizing a local oscillator signal 1412 which is derived from the voltage controlled oscillator 1460, applied to mixer 1410 through a pair of dividers 1470 and 1472. The data recovery subsystem includes a band pass filter stage 1432 having a low pass filter 1542 and a high pass filter 1544, each supplied with clock signals derived from the crystal oscillator 1552 through the divider 1554. The crystal oscillator 1552 also provides an output to the data synchronizer 1572, but in no way provides any clock signals utilized for the down conversion of the “received” signals supplied from the antenna array 702.

Thus, contrary to the Examiner’s assertion, nowhere does the reference disclose or suggest utilizing a single crystal oscillator that supplies a first clock signal having a frequency in a radio frequency band which is derived a second clock signal at a lower frequency than the first clock signal provided to the microprocessor and a third clock signal to the converter, the third clock signal being a different frequency than the first clock signal and the second clock signal, as now claimed. Similarly, the reference fails to disclose the method of the

invention of the subject Patent Application wherein a single crystal oscillator is utilized to provide both the radio frequency carrier signal for a transmitter and the clock signals for a microprocessor and a converter. Still further, nowhere does the reference disclose or suggest utilizing an RC oscillator for generating the clock signal for a microprocessor and a crystal oscillator for generating both the carrier frequency for the transmitter and the clock signal for the converter, as now claimed.

The Le Torc'h reference does not overcome the deficiencies of Fling et al. The Le Torc'h reference is directed to a radio station having digital enhanced cordless telecommunications circuitry for processing a bit stream to be transmitted over a communication channel. A bit stream from the adaptive differential pulse code modulation source 7 is formatted into frames by the burst mode controller 10 which receives a clock signal derived from the crystal controlled oscillator 2 through the divider 1. The data packets from the burst mode controller 10 are coupled to a modulator 11 which utilizes the local oscillator 14 to provide the radio frequency carrier signal. Thus, like Fling et al. and the prior art discussed in the BACKGROUND of the subject Patent Application utilizes multiple oscillators to obtain the carrier frequency and clocks controller/converter clock signal. Thus, not only does the reference fail to disclose or suggest the use of a single crystal oscillator for deriving both the carrier frequency of the modulator and the clock signal of the converter, or optionally and additionally a processor clock, the

reference teaches away from such a combination, in that it requires multiple oscillators to perform those functions.

Therefore, as neither Fling et al. nor Le Torc'h disclose or suggest the combination of elements which form the invention of the subject Patent Application, and in fact teach away from that combination, they cannot make obvious that invention.

It is respectfully submitted that neither Tian nor Yamazaki et al. overcome the deficiencies of Fling et al. combined with Le Torc'h, and thus their combination with those references fails to make obvious the invention of the subject Patent Application, as now claimed.

For all the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
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